What is claimed is:

1   1.   A security container that secures a document component by encapsulating, within the

2   security container, the document component, conditional logic for controlling operations on the

3   document component, and key distribution information usable for controlling access to the

4   document component.

1   2.   The security container according to Claim 1, wherein the security container secures a

2   portion of a higher-level document.

1   3.   The security container according to Claim 2, wherein the higher-level document has more

2   than one portion secured by security containers.

1   4.   A method of securing document content using security containers, comprising the step of

2   encapsulating, within a security container, a document component, conditional logic for

3   controlling operations on the document component, and key distribution information usable for

4   controlling access to the document component.

1   5.   The method according to Claim 4, wherein the key distribution information further

2   comprises an identification of one or more users and/or processes that are authorized to access

3   the document component.

1   6.   The method according to Claim 5, wherein the key distribution information further

2 comprises a symmetric key that encrypted both the document component and the conditional

3 logic that are encapsulated within the security container, wherein the symmetric key is stored in an

4 encrypted form for decryption by the authorized users and/or processes.

1 7.   The method according to Claim 6, wherein the encrypted form of the symmetric key

2 comprises a separate version of the key for each distinct user, process, group of users, or group of

3 processes, wherein the separate version has been encrypted with a public key associated with the

4 corresponding distinct user, process, group of users, or group of processes.

1 8.   The method according to Claim 5, wherein the authorized users and/or the authorized

2 processes are specified individually or as groups.

1 9.   The method according to Claim 4, wherein the conditional logic further controls access to

2 the document component.

1 10.   The method according to Claim 9, wherein the key distribution information further

2 controls access to the conditional logic.

1 11.   The method according to Claim 4, wherein the document component and the conditional

2 logic are encrypted before encapsulation within the security container.

1 12.   The method according to Claim 4, wherein the security container is encoded in structured

2   document format.

1   13.   The method according to Claim 12, wherein the structured document format is Extensible

2   Markup Language ("XML") format.

1   14.   The method according to Claim 5, wherein the identification of the one or more users

2   and/or processes comprises an identification of at least one group, the group having as members

3   one or more of the users and/or processes.

1   15.   The method according to Claim 14, wherein the members are determined dynamically,

2   upon receiving a request to access to the document component.

1   16.   The method according to Claim 15, wherein the dynamic determination further comprises

2   accessing a repository where the members of the group are identified.

1   17.   The method according to Claim 4, further comprising the steps of:

2   receiving, from a requester, a request to access the document component;

3   programmatically determining, using the key distribution information, whether the

4   requester is authorized to access the document component; and

5   programmatically evaluating, using the conditional logic, whether the request can be

6   granted, when the programmatically determining step has a positive result, and rejecting the

7   request when the programmatically determining step has a negative result.

1 18. The method according to Claim 17, wherein the conditional logic evaluates at least one of:

2 an identity of the requester; a device used by the requester; a context of the requester; a zone of

3 an application used by the requester; a user profile of the requester; and a target destination of the

4 request.

1 19. A computer program product for securing document content using security containers, the

2 computer program product embodied on one or more computer-readable media and comprising:

3 computer-readable program code means for receiving, from a requester, a request to

4 access document content, wherein the document content is encapsulated as a document

5 component within a security container along with conditional logic for controlling operations on

6 the document component and key distribution information usable for controlling access to the

7 document component;

8 computer-readable program code means for programmatically determining, using the key

9 distribution information, whether the requester is authorized to access the document component;

10 and

11 computer-readable program code means for programmatically evaluating, using the

12 conditional logic, whether the request can be granted, when operation of the computer-readable

13 program code means for programmatically determining yields a positive result, and for rejecting

14 the request when operation of the computer-readable program code means for programmatically

15 determining yields a negative result.

1   20.   A system for securing document content using security containers, comprising:

2   a security container that encapsulates a document component, conditional logic for

3   controlling operations on the document component, and key distribution information usable for

4   controlling access to the document component;

5   means for receiving, from a requester, a request to access the document component;

6   means for programmatically determining, using the key distribution information, whether

7   the requester is authorized to access the document component; and

8   means for programmatically evaluating, using the conditional logic, whether the request

9   can be granted, when operation of the means for programmatically determining yields a positive

10   result, and for rejecting the request when operation of the means for programmatically

11   determining yields a negative result.

1   21.   The system according to Claim 20, wherein the security container is embedded within a

2   document.

1   22.   The system according to Claim 20, wherein the security container encapsulates the

2   document component on a system clipboard.

1   23.   The system according to Claim 20, wherein the security container is placed on a user

2   interface.

1   24.   The system according to Claim 20, wherein the security container encapsulates the

2 document component for exchange using interprocess communications.

1 25. The system according to Claim 20, wherein the security container encapsulates the

2 document component for exchange using a messaging system.

1 26. The system according to Claim 20, further comprising means for copying the document

2 component to a target destination, wherein the means for copying copies the entire security

3 container in order to copy the document component.

1 27. A method of securing document content using security containers, comprising steps of:

2 receiving, from a requester, a request to access document content, wherein the document

3 content is encapsulated as a document component within a security container along with

4 conditional logic for controlling operations on the document component and key distribution

5 information usable for controlling access to the document component;

6 programmatically determining, using the key distribution information, whether the

7 requester is authorized to access the document component;

8 programmatically evaluating, using the conditional logic, whether the request can be

9 granted, when the programmatically determining step has a positive result, and for rejecting the

10 request when the programmatically determining step has a negative result; and

11 charging a fee for carrying out one of more of the receiving, programmatically

12 determining, and programmatically evaluating steps.

1   28.   A method of securing document content using security containers, comprising steps of:

2   receiving, from a requester, a request to access document content, wherein the document

3 content is encapsulated as a document component within a security container along with

4 conditional logic for controlling operations on the document component and key distribution

5 information usable for controlling access to the document component;

6   programmatically determining, using the key distribution information, whether the

7 requester is authorized to access the document component;

8   programmatically evaluating, using the conditional logic, whether the request can be

9 granted, when the programmatically determining step has a positive result, and for rejecting the

10 request when the programmatically determining step has a negative result; and

11   charging a fee to the requester when the programmatically evaluating step determines that

12 the request can be granted.